

# HOW COULD BE COMBINED THE SUBJECTIVITY AND DINAMISM TO GIVE THE WORLD A COMPREHENSIVE DEFINITION OF WASTE?

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## Rezumat

Având în vedere problemele ce pot interveni ca urmare a utilizării incorecte a unor concepte elementare și riscurile care pot apare datorită diversității punctelor de vedere existente cu privire la conținutul noțiunii de deșeuri s-a considerat necesară studierea principalelor definiții utilizate în mod curent și încercarea de a oferi literaturii de specialitate o definiție proprie ce are șansele să devină unanim acceptată în comunitatea teoreticienilor și practicienilor în domeniul managementului deșeurilor.

În încercarea de a defini deșeurile cât mai complet și corect și de a elimina posibilitatea subiectivizării conceptului lucrarea pornește de la identificare și interpretarea a două perspective esențiale ale procesului de transformare a bunurilor în deșeuri. În cadrul unui raționament elementar bazat pe logica argumentelor autorul comentează diverse perspective și puncte de vedere surprinse atât în literatura de specialitate cât și în cuprinsul unor documente oficiale. Apelând la o abordare axată pe cauze, ci nu pe efecte se reușește identificarea aspectelor esențiale care determină apariția deșeurilor, pierderea utilității bunurilor, atingerea scopului pentru care au fost create, apariția intenției utilizatorului de a debarasa bunurile devenite inutile, incidența responsabilității și dinamica relațiilor de proprietate. Iar în final se formulează o definiție complexă a deșeurilor.

**Cuvinte cheie:** Definiția deșeurilor, utilitatea bunurilor, relații de proprietate, generarea deșeurilor, debarasarea deșeurilor

## Abstract

Given the problems that can occur due to incorrect use of basic concepts and risks that may appear because of differences in present points of view concerning the content of the waste concept was considered necessary to study the main definitions currently used and attempt to provide to the specific literature an own definition of waste which we think will become widely accepted in the theoreticians and practitioners community of waste management issue.

In our attempt to completely and accurately define waste and to eliminate the possibility of concept subjectivitz the working paper starts from identification and interpretation of two essential perspectives of the transforming goods into waste process. Throughout an elementary logical based system of arguments the author comments various perspectives and approaches captured both in literature and the contents of official documents. Appealing to a cause-based argumentation, but not the effects, its identify core issues that cause waste generation, loss of goods utility, achieve the purpose for which they were created, the occurrence of user intention to dispose the products become unnecessary, incidence of responsibility and ownership dynamics. And finally it formulates a comprehensive definition of waste.

**Key Words:** Waste definition, goods utility, ownership relations, waste generation, waste disposal

**JEL Classification:** Q53

The European legislation recognizes the need to provide a common terminology and a definition of waste in order to improve efficiency and effectiveness of waste management systems in the Community. Problems related to the definition of waste have occurred as a result of different law interpretations of Member States make in relation to the waste definition in the Waste Framework Directive.

Despite efforts made until now we are definitely in front of a wide diversity of perspectives regarding the content of waste concept, which certainly justifies the complexity, subjectivity and flexibility of this concept (Burcea, 2009). The Italian Government consider that the definition of waste offer too much importance to a subjective element namely the owner's decision to get disposed of that substance or object. The Danish authorities argue that the definition of waste covers all waste products, which are defined as all those products that fall outside the intended purpose of a production process. Danish position is very clear-cut on this issue and is based on market principles, authorities considering that waste products have an extremely reduced economic value and their use depends on the availability offered by the market. Also, the French Government seems to have a more extended concept of waste, noting that waste, including residues continue to be waste until they are recovered, reused or recycled. In Netherlands, a substance need not to be necessary classified as waste if it is transported directly from the manufacturer to the person who will ensure its use in certain legal conditions. That substance must be 100% used in a production process, and should not be the subject of any process comparable to traditional forms of waste recovery, treatment or elimination process. United Kingdom maintains that a substance may be considered as waste when it leaves the economic and trade cycle, entering into specialized waste recovery operations.

Ambiguousness of the waste definition dates from more time back, but in the middle of '90s became acute. Bontoux and Leone (1997) describe the context of that time: "The problems related to waste definition generated tensions in Europe in the industrial sectors and in particular those involved in the waste recovery and recycling. Most turmoil and concerns in this area came from the fact that the waste definition regulated in Waste Framework Directive presents a very broad vision, including some materials witch have been considered a long time not to be a waste by some theorists and practitioners alike.

The complexity of problems caused by ambiguous definition and classification of waste is striking like many misunderstandings arising in communication process between different stakeholders as a result of its perceptions of the concept. Various interpretations of the waste definition and non-uniform application of European law interferes with traditional practices of waste management and hence a

number of consequences may occur, which is manifested in the economic, environmental, social areas and even in world trade issue. Consequently it is appropriate and necessary to provide a new perspective for specific problems of waste management, whose main coordinates have to target the Community Environmental Policy objectives like sustainable development, natural resource conservation, environmental protection and public health, employment and growth.

It is essential to examine the nature and properties of waste and to achieve a more complete description of the waste concept. Without doubt, there is a pressing need for clarification and objectification of this concept. It is questionable however the possibility to achieve such a goal, because that umbilical link established between the waste and its owner, the concept of waste cannot be objectively defined. Therefore, we consider that an appropriate approach for waste defining should start from a different perspective. We shouldn't examine why humanity discards or not the unusable things, but must understand the reasons for which the material goods become waste. Therefore it must be more correct an attempt to define waste having focus to transformation process of the goods into waste and understanding the causes that determine this process, but not the process itself.

Seeking to provide our own definition of the waste concept should be based on descriptions of current points of view and analysis of current definitions used for this concept. The starting point is the definitions commonly used in the official documents published by international organizations involved in complex issue of waste management. In the first article of European Directive of Waste European Council define waste as "any substance or object that the holder discards or is required to discard" (European Council, 2006). The Organization for Economic Cooperation and Development has the same perspective (O.E.C.D., 1998) regarding waste definition with a little reference made to distinguish ordinary waste from radioactive waste. So OECD specialists think, "wastes are materials other than radioactive materials intended for disposal". United Nation Environment Programme use currently a definition like "wastes are substances or objects, which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law" (U.N.E.P., 1989). Accordance to the Basel Convention "wastes are substances or objects which are disposed or are intended to be disposed or are required to be disposed of by the provisions of national laws". (U.N.E.P., 2004). In the annual reports of United Nations Statistics Division wastes are defined as "materials that are not prime products (that is products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and of which he/she wants to dispose".

At first glance all these definitions shows that there is a common perspective presented as expressions

like "discards", "is required to discard", "intended for disposal" or "wants to dispose". Thus, the essential characteristic of materials which become waste appears to be being discarded, disposed of, or removed. Finding the obvious similarities between the definitions set out above let us to formulate some rhetorical questions such as: "Why the user decides to remove some material goods?", "What conditions must meet the goods currently used to be the subject of dispose?", "Under what conditions the user may choose to remove their goods?", "Why the user is not interested for goods utilisation?". Maybe they don't present an added value or maybe the user decides that is proper to discard them than to use them. So kind of answers became possible if we take into account Pichtel (2005) waste definition: "solid material possessing a negative economic value, which suggests that it is cheaper to discard that to use". Answers to such questions contribute to an easier understanding of the reasons for underlying material goods and products to waste.

The diversity of all these points of view regarding the main causes on why waste are generated make concept of waste to be relative. First we consider that the user removes their own goods because it no longer has interest. Why no interest exists for these goods? natural question is follow: perhaps because they have lost its utility, because they are longer in guarantee terms or because they no longer meet user needs, because they are no longer functional or simply because of various reasons can't fulfill the purpose for which they were created and then purchased by the user. All these apparent solutions to solve the problem that low interest property presents to the user and would lead to removal or disposal revolves around an intrinsic economic characteristics of the goods, utility. So from an economic perspective we can consider that an object becomes waste when its lost utility for various causes. For an user objects become waste because it lost utility, but for another user the same objects may be useful and so can not be considered waste. Under certain conditions of time and space subjective nature of utility forward in transforming process of objects into the waste and therefore the concept of waste has a distinct subjectivity.

Continuing the logical thread of the idea we can deepen the analysis of the causes or reasons why certain objects become unnecessary, thus transforming in waste. From many cases that can cause loss of utility of an object it can identify four major categories of reasons. The first reason could be fulfilling the purpose for which they were produced. Is quite normal after the common use of goods for the purpose for which they were produced that products lose their value becoming unwanted goods that have no purpose and therefore are removed by the user, in the lack of utility. It's the case of disposable products that depreciates after being used for the sole purpose for which they were created.

Another issue because the goods become unnecessary may be impairment of quality and performance

standards set out in product design process. Because the optimal duration of life cycle has past away the product cannot operate at optimum parameters and satisfies a reduced level of user needs and therefore lose their utility, so it will be discarded. Is the typical case of the appliance which lost its performances designed after a long use and end up becoming waste.

A third reason may be the user inability to use his own goods for the purpose for which they were produced. The user is unable to perceive the usefulness of his own goods mainly because of its improper behavior, either because he didn't use properly the products for which these were created, either because he didn't use or consume in time or until expiry date. Examples in which the user was not able to consume the food within the guarantee period or the user caused damage to electrical equipment due to improper utilization are the most significant.

Finally, a fourth reason could be changing the user's wishes and demands as a result of continuous dynamic needs. In those conditions, the user believes that his own goods have no utility and therefore must be removed or eliminated, independent of the quality of goods, performance and real functionality of his products. A typical example is the change of perfectly functional furniture with a modern one or frequent renewal of clothing at every change in fashion design. The user realizes the quality and performance of his goods which satisfy his own needs but prefers to switch to some much more modern, thanks to new aspirations and demands.

As a result of the discussion so far we can say that material goods become waste either because it wasn't used properly or because they have lost its own value, so they have no longer utility. From such a perspective waste can be defined as "objects which have no purpose, or that can not be used for purposes that were created". But the missing element in definition is "dispose process" which can lead to a misunderstanding of the concept that waste is to be a temporary or interim status. A further statement as "objects that the user intends or is required to discard because they no longer have any purpose or can not be used for purposes that were created" may remove the possibility of the user to reuse waste. The fact is that the reasons why the objects lose their usefulness can come from both the manufacturer and the user of those goods.

Of the four categories of reasons that can cause loss of utility for an object only the first two fall under the influence of producer goods, the other two being determined by user behavior. So the definition of waste should take into account both the issues of inherent characteristics of goods and products and aspects related to user behavior. Inevitably the producer determines the usefulness of a good throughout the methods of configuring designing and manufacturing processes of that good. To encapsulate not only the user behavior, but producer behavior defining waste should start from the expression "objects that

can not be used in purposes that were created for because of irreversible changes in their structure, quality and performance.

With regard to user behavior appears natural question, "Why the user prefers in certain conditions of time and space to removal the value added goods, ie goods that meet the minimal standards of quality and performance?" or "What could be the reasons why a perfectly working thing may be or become a waste?" The question is the more justified as the settlement of several disputes in the European Court of Justice held that "a substance which has its user may constitute waste even when present the characteristics necessary for reuse" (Purdue, 1998). A similar point of view shared many other experts and specialists who believe that "an object can be regarded as waste even when it not used to its full potential" (Dijkema, Reuter and Verhoef, 2000).

To identify the main reasons for which an object perfectly functional may become waste we will consider the case of two neighbors who have owned two identical cars. When one of them sells his car materials, then the supplies and spare parts necessary to repair the machine will lose its utility and if the user decides that this goods should be discarded or removed will become waste. Of course we can bring into question the principle of waste prevention in the spirit of that citizen could avoid spare of waste by offering them in the same time with car selling. Returning to our question, certainly that consumables and spare parts will become waste for the citizen who sold the car, if will not be recovered. But for the citizen who has not sold the car all those materials, supplies and spare parts are an useful resource because he may use them for car repairs. So for the citizen who sold the car the goods become waste, in exchange for citizen who not sold the car the same goods can be a resource. Such an approach, in which objects are transformed into waste not afforded by its nature and properties, but on the user's intention and desire is specific to a legal perspective that takes into account the relationship between user named hereinafter owner and its good. The evolution of this property relationship offers a special dynamism for waste concept.

If in the economic outlook goods become waste according to the value and usefulness that presents for user, in the legal perspective objects become waste when the owner decides not to take responsibility and to broke the property relations between him and his object. This approach is supported by the European Chemical Industry Council experts who believes that "not the materials nature and properties determine whether or not objects became waste, but rather the actions and intents of the materials owner". So only those materials that no longer have utility for their owners, who can no longer be used and it discards or intends to discard can be considered as wastes. So in the definition of waste should be included in one another way the proper owner's intention, therefore to remove or eliminate materials



that no longer have utility.

The analysis of legal perspective on the transformation process of objects into waste can start with the owner responsibility, because according to responsibility the discontinue property relationship may intervene. Palmer (2001) proposes the following definition of waste: "waste is any object for the owner does not wish to assume responsibility". The definition faithfully reflects the dependence of waste occurrence by dynamic relations between the objects will become waste and its owner. But if the definition of waste must have regard to property relations, in witch way the definition can integrate the randomly discard problems and the issue of waste with no owner. If we continue the logic of Palmer definition we should understand that without the owner might not raise the question of considering the object as waste. It follows that any object that is not owned by a natural or legal person is a waste. But how we treat the situation of value added waste, such as reusable waste, because the mean of Palmer definition would transmit the idea that if the waste will find a new owner then will no longer considered to be waste. Here comes the responsibility concept. What makes the distinction between object and waste is in fact not the existence of an owner, but ownership. The waste generated because no longer have utility for its owner will not be considered waste if someone else will take responsibility for it.

Discussing the case of a used fridge abandoned in parking may be quite interesting. The fridge is definitely a waste: the citizen who abandoned because the good has no longer value or utility; the owner is unknown and did not want to assume responsibility for disposal and gave up to ownership right. Refrigerator abandoned in the car parking will remain waste until for various reasons another citizen will pick-up from there: perhaps because it have utility or because it can build or even because that citizen may assume responsibility for safe disposal of that waste. When used fridge will be taken from the car parking by another citizen the ownership was transferred to the citizen who took the refrigerator and thus the object can not be considered waste. So throughout Palmer approach the abandoned fridge was a waste only as long as no one has exercised its ownership.

If we want to deepen the problem we can continue our discussion to identify whose fault is for abandoned refrigerator in the parking. Fault belongs indisputably to the first owner decided not to take responsibility for used fridge, abandoning him after the good has not matched with owner needs. It is possible that the owner decided to abandon the refrigerator after finding that the product has ceased to operate at optimum parameters and decided that it has no longer useful. Following the logic of this argument we can consider that refrigerator became waste when its function has not complied with designed quality and performance standards, but not when the owner decided to abandon it. The second owner took over the fridge and also ownership substituting the former owner, because it

considered that the used good has a minimum residual value. Therefore abandoned freezer is not a waste; the new owner assumes responsibility for the object because he has identified a new purpose for abandoned refrigerator. It can't be a similar discussion if operator sanitation worker recovers the abandoned fridge. Its role is to collect waste, so he cannot take any formal or personal responsibility for each waste that he pick-up. This indicates that indeed not responsibility or property relations should be placed in the definition of waste, but the element that is subsequent to products using, ie the removing or disposing process. So until and after they enter into the waste management system the goods that lose touch with the owner remain waste whether will succeed in restore relations with other owners. The conclusion is once that the relationship has broken, the goods has no owner so its transform irreversibly in waste. With such a conclusion are agreeing many specialists; authors like Winiwarter (2002) think that waste can be described, as "material for witch the primary generator or user abandoning the material within the urban area requires no compensation abandonment". If it succeeds in restoring property relations with another owner the used goods can be considered reusable waste, but are still waste. That's why products re-use is considered to be a part of complex waste preventing activities in the pre-consumption or consumption stage in life cycle approach of materials.

But it is essential to establish an elementary thing. In accordance with the laws of several countries, the company that collects waste becomes their own. Therefore, according to Palmer's definition waste has an owner so should not be considered to be waste. But they are continuing to be considered waste because it has not been awarded any purpose. So it is not sufficient to identify a new owner but also assigning another purpose for objects become waste, mainly because they have failed in fulfilling the old purpose. The absence of a clear purpose makes that the good to be still considered as waste, independent of owner existence or potential ownership relations.

Under Palmer's definition, any object that acquires a new owner that wants to take responsibility for this is not a waste, regardless of history of its origin. Categorically this definition has some limits, and to identify them we will start from the example of a restaurant buying canned for preparation of meals served to its customers. The quantity purchased will be received as inventory value, so cannot be considered waste. But if within the validity preserved will not be used for purposes that were acquired, their content will degrade, thus preserved will can not be used and will become waste. So this products they become waste because the restaurant has not assumed responsibility for a correctly use of preserved for the purpose for which they were created. At this point, as Palmer approach say, appears intent to transfer ownership and responsibility for the product becomes a waste. If an inspection of the Department of Public Health would establish the no longer of preserved validity inspectors will require the restaurant to take responsibility for eliminating. Despite taking over responsibility and existing of an



owner, expired preserved will remain waste because the restaurant failed to use preserved properly and timely in the purpose for which they were manufactured.

Given the diversity of opinion expressed previously about the evolution and implications of property relations between goods and owner in terms of wider waste issues we conclude that the exercised ownership right must not be the only one coordinated for a comprehensive definition of waste. A special role in defining the concept of waste should be awarded to the purpose for which goods are created. We may consider that waste is "goods with a specific purpose, but an unknown owner" or simply "objects with no specific purpose".

We believe that a correct and comprehensive definition of waste should encompass the full range of coordinated raised in our discussion so far: the utility of goods, the purpose for which they were created, the consumer's intention to dispose them of the inutility effect, responsibility on waste disposal and dynamics of ownership rights. We are able now to offer our own definition of waste: "Wastes are objects that becomes useless in certain conditions of time and space because the fulfill of purpose for which they were created and that are removed or intended to be disposed because the user does not take responsibility and ownership over them."

The definition illustrates two essential features of the waste concept: subjectivity and dynamism. The same goods can be considered to be waste or value added goods for different people in different places or at different times. Also the definition reflects the full interweaving to merger of the two perspectives regarding reasons why objects became waste, the economic approach and the juridical approach.

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